



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,102	09/21/2000	Gaku Takano	016907/1153	6389
22428	7590	12/31/2003	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			CHOOBIN, BARRY	
			ART UNIT	PAPER NUMBER
			2625	7

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/667,102

Applicant(s)

TAKANO ET AL.

Examiner

Barry Choobin

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-22 is/are allowed.
- 6) ☒ Claim(s) 1-16, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on October 25, 2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
2. The information disclosure statement (IDS) submitted on May 26, 2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to because Fig. 12, block ST42 incorrectly recites "HUMMING". Fig. 12, block ST42 should recite "HAMMING".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 5, 6, 7, 10, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Doi et al (US 4,955,061).

As to claim 1, Doi et al disclose an image processing apparatus comprising: extraction means for setting, when a plurality of still image data of successive original images of the same

Art Unit: 2625

format have been input (column 3, lines 20 – 23), one of the plural still image data as reference image data (column 3, lines 23 – 26, preceding lines as a reference line), and extracting respective image correlation information of the plural still image data including the reference image data (column 3, lines 25 – 27);

encoding means for encoding the image correlation information extracted by the extraction means into encoded data (column 3, lines 43 – 49 and column 4, lines 62 – 67 wherein correlation or the absolute value between a1 and b1 in Fig. 1B is determined and based on the result of the correlation determination encoding is performed) and output means for outputting the encoded data encoded by the encoding means and the reference image data (column 3, lines 50 – 56).

As to claim 2, Doi et al disclose an image processing apparatus according to claim 1 (see claim 1), wherein said plural still image data are a plurality of digital still image data (column 1, lines 14 – 22, document corresponds to still image).

As to claims 5, 7, 13 and 16, Doi et al disclose encoding means compresses the plural image correlation information by run-length encoding (column 6, lines 18 – 25).

As to claim 6, Doi et al disclose an image processing apparatus comprising: input means for inputting encoded data formed by encoding respective image correlation information between reference image data and a plurality of still image data (see claim 1); decoding means for decoding the respective image correlation information from the encoded data input by the input means (column 3, lines 50 – 67); and image restoring means for restoring the plural still image data from the image correlation information decoded by the decoding means and the reference image data input by the input means (Fig.2, 7b).

Claims 10, 14, 23 and 24 are similarly analyzed and rejected as claims 1 and 6.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 8, 11, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi et al in view of Hata et al (US 2001/0024525).

As to claim 3, Doi et al disclose an image processing apparatus according to claim 1 (see claim 1). However, Doi et al is silent about by using an exclusive OR. But on the other hand, Hata et al disclose an image encoding apparatus comprising: using exclusive OR (page 9, paragraph 0319).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the exclusive OR block constructing means as thought by Hata et al with the method of Doi et al in order to achieve more efficient encoding and decoding techniques.

As to claim 11, Doi et al disclose an image processing apparatus according to claim 10 (see claim 10). However, Doi et al is silent about first encoding means checks a run of zero values in the respective image correlation information and produces entropy codes.

Art Unit: 2625

But on the other hand Hata et al disclose an image encoding apparatus comprising: encoding means checks a run of zero values in the respective image correlation information and produces entropy codes (page 13, Paragraph 0378).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the entropy encoding means as thought by Hata et al with the method of Doi et al in order to achieve more efficient encoding and decoding techniques.

Claims 4, 8, 12, and 15 are similarly analyzed and rejected.

Allowable Subject Matter

8. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 17 – 22 are allowed.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A: US Patent 5859604 to Slaterry et al.

B: US 5883975 to Narita et al.

C: US 6028981 to Hirasawa et al.

D: US 6091854 to Slaterry et al.

E: US 4723161 to Koga.

F: US 5363139 to Keith.

G: US 5563661 to Takahashi et al.

Art Unit: 2625

H: US 5619338 to Nakai et al.

I: US 5592569 to Li.

CONTACT INFORMATION

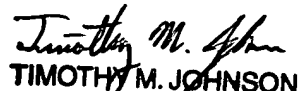
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry Choobin whose telephone number is 703-306-5787. The examiner can normally be reached on M-F 7:30 AM to 18:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Barry Choobin

December 16, 2003


TIMOTHY M. JOHNSON
PRIMARY EXAMINER